
Injectable pro-regenerative scaffold for treating symptomatic peripheral artery disease

Grant Award Details

Injectable pro-regenerative scaffold for treating symptomatic peripheral artery disease

Grant Type: Therapeutic Translational Research Projects

Grant Number: TRAN1-09814

Project Objective: Completion of preclinical stage development activities for an injectable pro-regenerative scaffold for treating symptomatic peripheral artery disease allowing for the conduct of a well-prepared pre-IND meeting with the FDA.

Investigator:

Name:	Karen Christman
Institution:	University of California, San Diego
Type:	PI

Disease Focus: Vascular Disease

Award Value: \$2,839,317

Status: Active

Grant Application Details

Application Title: Injectable pro-regenerative scaffold for treating symptomatic peripheral artery disease

Public Abstract:**Translational Candidate**

Injectable biomaterial derived from the natural scaffolding of porcine muscle

Area of Impact

Improving the quality of life of patients with symptomatic peripheral artery disease.

Mechanism of Action

The proposed mechanism of action is through recruitment of blood vessels and recruitment and differentiation of muscle stem cells. The injected material forms a new porous and fibrous scaffold, which contains appropriate tissue specific cues to stimulate muscle regeneration.

Unmet Medical Need

The prevalence of peripheral artery disease is high in adults and while there are currently some useful symptom improving therapies, there is an unmet need for new therapies for the numerous individuals where these approaches are not successful to improve blood flow and muscle function.

Project Objective

Pre-IND meeting

Major Proposed Activities

- Manufacture product to support nonclinical studies required by FDA
- Nonclinical safety studies
- Clinical trial planning and development

Statement of Benefit to California:

The prevalence of peripheral artery disease is 12% and represents a population that is approximately equal to that of coronary artery disease. The significant reduction in quality of life and high healthcare cost burden necessitates the development of new therapies for these patients. Our injectable biomaterial is a cost effective regenerative medicine strategy to improve blood flow and muscle function, thereby improving patient quality of life.

Source URL: <https://www.cirm.ca.gov/our-progress/awards/injectable-pro-regenerative-scaffold-treating-symptomatic-peripheral-artery>